

## **What is claimed is:**

**[Claim 1]** An automotive center stack panel assembly comprising:

an automotive instrument panel assembly;

a recessed display chamber formed in said instrument panel assembly;

a video display panel assembly mounted within said recessed display chamber;

a rear pivot link assembly having a rear first fixed pivot end rotatably mounted to said automotive instrument panel assembly and a rear second fixed pivot end;

a forward pivot link assembly having a forward first fixed pivot end rotatably mounted to said automotive instrument panel assembly and a forward second pivot end; and

a control panel having an upper control panel end and a lower control panel end and a control panel slot guide, said rear second fixed pivot end rotatably mounted to said upper control panel end, said forward second pivot end slidably mounted within said control panel slot guide, said rear pivot link assembly and said forward pivot link assembly allowing said control panel to rotate such that said control panel is pivotable between a display hidden position and a display exposed position, said control panel covering said recessed display chamber when in said display hidden position.

**[Claim 2]** An automotive center stack panel assembly as described in claim 1, wherein said control panel includes a control panel outer surface generally coincident with an instrument panel outer panel surface when said control panel is in said display hidden position.

**[Claim 3]** An automotive center stack panel assembly as described in claim 1, further comprising:

a linkage panel mounted to said rear pivot link assembly, said linkage panel forming a shelf in said recessed display chamber when said control panel is in said display exposed position.

**[Claim 4]** An automotive center stack panel assembly as described in claim 1, further comprising:

at least one upper engagement element frictionally engaging said control panel when said control panel is in said display hidden position.

**[Claim 5]** An automotive center stack panel assembly as described in claim 1, further comprising:

a flexible electronics cable having a first cable end mounted to said video display panel assembly and a second cable end mounted to said control panel.

**[Claim 6]** An automotive center stack panel assembly as described in claim 5, further comprising:

a linkage panel mounted to said rear pivot link assembly, said linkage panel forming a shelf in said recessed display chamber when said control panel is in said display exposed position, said linkage panel hiding said flexible electronics cable when in said display exposed position.

**[Claim 7]** An automotive center stack panel assembly as described in claim 1, further comprising:

a plurality of control buttons positioned on a control panel outer surface.

**[Claim 8]** An automotive center stack panel assembly as described in claim 1, wherein said video display panel assembly comprises a navigation system.

**[Claim 9]** An automotive center stack panel assembly as described in claim 1, wherein said rear pivot link assembly rests on said forward pivot link assembly when in said display exposed position.

**[Claim 10]** An automotive center stack panel assembly as described in claim 5, further comprising:

a plurality of control buttons positioned on a control panel outer surface, said flexible electronics cable in communication with said plurality of control buttons and said video display panel assembly such that said plurality of control buttons may be utilized to control said video display panel assembly.

**[Claim 11]** An automotive center stack panel assembly comprising:

an automotive instrument panel assembly;

a recessed display chamber formed in said instrument panel assembly;

a video display panel assembly mounted within said recessed display chamber;

a rear pivot link assembly having a rear first fixed pivot end rotatably mounted to said automotive instrument panel assembly and a rear second fixed pivot end, said rear pivot link assembly rotatable between a vertical rear pivot stowed position and a horizontal rear pivot deployed position;

a forward pivot link assembly having a forward first fixed pivot end rotatably mounted to said automotive instrument panel assembly and a forward second pivot end, said forward pivot link assembly rotatable between a vertical forward pivot stowed position and a horizontal forward pivot deployed position;

a control panel having an upper control panel end and a lower control panel end and a control panel slot guide, said rear second fixed pivot end rotatably mounted to said upper control panel end, said forward second pivot end slidably mounted within said control panel slot guide, said rear pivot link assembly and said forward pivot link assembly allowing said control panel to rotate such that said control panel is pivotable between a display hidden position and a display exposed position,

said control panel covering said recessed display chamber when in said display hidden position; and

a plurality of control buttons positioned on a control panel outer surface.

**[Claim 12]** An automotive center stack panel assembly as described in claim 11, wherein said control panel includes a control panel outer surface generally coincident with an instrument panel outer panel surface when said control panel is in said display hidden position.

**[Claim 13]** An automotive center stack panel assembly as described in claim 11, further comprising:

a linkage panel mounted to said rear pivot link assembly, said linkage panel forming a shelf in said recessed display chamber when said control panel is in said display exposed position.

**[Claim 14]** An automotive center stack panel assembly as described in claim 11, further comprising:

a flexible electronics cable having a first cable end mounted to said video display panel assembly and a second cable end mounted to said control panel, said flexible electronics cable in communication with said control panel and said video display panel assembly such that said control panel may be utilized to control said video display panel assembly.

**[Claim 15]** An automotive center stack panel assembly as described in claim 11, wherein said rear pivot link assembly rests on said forward pivot link assembly when in said horizontal rear pivot deployed position.

**[Claim 16]** An automotive center stack panel assembly as described in claim 11, wherein forward second pivot end slides between a lower slot guide end and an upper slot guide end as said forward pivot link assembly is moved from said vertical forward pivot stowed position to said horizontal forward pivot deployed position.

**[Claim 17]** An automotive center stack panel assembly as described in claim 14, further comprising:

a linkage panel mounted to said rear pivot link assembly, said linkage panel forming a shelf in said recessed display chamber when said control panel is in said display exposed position, said linkage panel hiding said flexible electronics cable when in said display exposed position.

**[Claim 18]** A method of accessing a video display panel assembly within an automotive center stack panel assembly comprising:

pivoting a control panel from a display hidden position to a display exposed position thereby exposing a video display panel assembly mounted within a recessed display chamber, said control panel rotatably engaged to an automotive instrument panel assembly by way of a rear pivot link assembly and a forward pivot link assembly,

said rear pivot link assembly having a rear first fixed pivot end rotatably mounted to said automotive instrument panel assembly and a rear second fixed pivot end rotatably mounted to an upper control panel end, said forward pivot link assembly having a forward first fixed pivot end rotatably mounted to said automotive instrument panel assembly and a forward second pivot end slidably mounted within a control panel slot guide formed on said control panel; and

rotating said control panel from said display exposed position to said display hidden position to cover said video display panel assembly when said video display panel assembly is not in use.

**[Claim 19]** A method as described in claim 18, further comprising:

controlling said video display panel assembly using a plurality of control buttons positioned on a control panel outer surface, said plurality of control buttons communicating with said video display panel assembly by way of a flexible electronics cable connecting said control panel assembly to said video display panel assembly.

**[Claim 20]** A method as described in claim 19, further comprising;

hiding said flexible electronics cable using a linkage panel mounted to said rear pivot link assembly, said linkage panel forming a shelf in said recessed display chamber when said control panel is in said display exposed position.